

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,193,187 B2  
 APPLICATION NO. : 10/775473  
 DATED : March 20, 2007  
 INVENTOR(S) : Ing-Shin Chen et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page, Item (54), Inventors, add -- Richard Kramer, Sharon, MA (US) --.

Column 3, line 20: " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 4, line 18: " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 6, line 11: " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 6, line 59: " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 8, line 14: " $R = R_0 \cdot [1 + \alpha_p (T - T_0)]$ " should be

--  $R = R_0 \cdot [1 + \alpha_p (T - T_0)]$  --.

Column 8, line 17: " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 9, line 8:

" $T_c = T_a + \eta W = T_a + \eta \cdot I_c^2 R_c = T_a + \eta \cdot I_c^2 R_0 \cdot [1 + \alpha_p (T_c - T_0)]$ " should

be --  $T_c = T_a + \eta W = T_a + \eta \cdot I_c^2 R_c = T_a + \eta \cdot I_c^2 R_0 \cdot [1 + \alpha_p (T_c - T_0)]$  --.

Column 9, line 22: " $\varepsilon = \alpha_p \eta I^2 R_0$ " should be --  $\varepsilon = \alpha_p \eta I^2 R_0$  --.

Column 9, line 64: " $R \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W) - T_0]\}$ " should be

--  $R \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W) - T_0]\}$  --.

Column 10, lines 11-12:

" $R_s = R_0 \cdot \{1 + \alpha_p [(T_{a,s} + \eta_s \cdot W_s) - T_0]\} \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W_s) - T_0]\}$ "

should be

--  $R_s = R_0 \cdot \{1 + \alpha_p [(T_{a,s} + \eta_s \cdot W_s) - T_0]\} \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W_s) - T_0]\}$  --.

Column 10, line 32: " $\alpha_p$ " should be --  $\alpha_p$  --.

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Column 11, line 23: " $R_s \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W_s) - T_0]\} = R_a + \alpha_p \eta \cdot R_0 \cdot W_s$ "  
should be

--  $R_s \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W_s) - T_0]\} = R_a + \alpha_p \eta \cdot R_0 \cdot W_s$  --.

Column 12, line 51: "can be ed as" should be -- can be determined as --.

Column 13, line 26: " $I^1(R_s - R) \ll \Delta W$ " should be --  $I^2(R_s - R) \ll \Delta W$  --.

Column 18, lines 3-4 (claim 14): " $\Delta W = 2 \cdot \frac{m}{\alpha_p \times t \times R_0} \cdot [R_s - R]$ " should be  
--  $\Delta W = \frac{m}{\alpha_p \times t \times R_0} \cdot [R_s + R(0) - 2R]$  --.

Column 18, line 65 (claim 18): " $\alpha_p$ " should be --  $\alpha_p$  --.

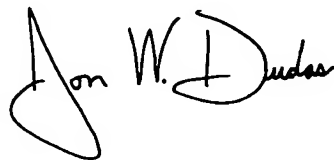
Column 19, line 55 (claim 20): " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 20, line 22 (claim 21): " $\alpha_p$ " should be --  $\alpha_p$  --.

Column 20, line 65 (claim 22): " $\alpha_p$ " should be --  $\alpha_p$  --.

Signed and Sealed this

Fifteenth Day of January, 2008



JON W. DUDAS  
Director of the United States Patent and Trademark Office